



PERCEIVED RISKS AND RISK REDUCTION STRATEGIES IN ONLINE GROUP-BUYING

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ABSTRACT

Purpose: *The purpose of this research is to examine the relationship between risk perceptions (financial, performance, social, time and privacy risks) and risk reduction strategies (brand loyalty, word of mouth, past experience, money back guarantee, store image, shopping, major brand image, free sample, website reputation, and payment security) in online group buying context.*

Design/methodology/approach: *A questionnaire survey was conducted in campus. There are 212 questionnaires were received, and 198 of them are valid.*

Findings: *The results from current study suggested that when subjects perceived financial risk, the brand loyalty, word of mouth, money back guarantee, website reputation and payment system will be adopted to reduce the risk. In addition, performance risk is related to brand loyalty, word of mouth, money back guarantee, major brand image and free sample. Time risk is related to shopping and website reputation, while privacy risk has significant correlation with shopping. There are no risk-reduction strategies related to social risk. Thus, the practitioner have to try some other ways to reduce social risk.*

Practical implications: *Results from current study provide useful knowledge to help the operators who are running online group business in understanding useful strategies to reduce different risks perceived by their potential customers. For example, building strong brands and store image, encourage consumers to spread positive word of mouth are useful ways to mitigate consumers' concern about the performance of the product/service.*

Originality/value: *Online group-buying is one of the fasted growing business model. However, knowledge regarding consumers' concern and possible ways to relief the perceived risks in online group-buying context are limited. Results from current study can contribute to the field by illustrating the useful strategies the e-vendors can use to reduce possible concerns.*

Keywords: Online group-buying, perceived risk, risk reduction strategy, e-commerce



INTRODUCTION

With the popularity of the internet, online shopping has become one of the most important shopping patterns. In addition, group-buying as a new business model also grows fast in recent years. In Taiwan, only 11% of users use online group-buying in 2009, but the number doubled to 22.3% in 2010. However, although online group-buying grows rapidly, complaints have also increased. Popular consumer disputes about online group-buying include: (1) restaurants claim the seats are full, unable to reserve, or even there has seat but still not accept who has coupon purchased from online group-buying website; (2) the restaurants do not indicate the consumption restrictions (such as meals cannot enjoy a free supply of ice cream); (3) actual product served or price compare to the information post on the group-buying site is different. It reveals that a transaction via group-buying site is convenient, but also involves lots of perceived risks and unexpected consequences. Thus, it is important for group-buying marketers to understand how to adopt different risk-reduction strategies to relief consumers' potential perceived risks. The objective of current study is to examine the relationship between perceived risks and risk-reduction strategies to understand how to reduce which perceived risk by using which reduction strategy in online group-buying context.

LITERATURE REVIEW

Online Group Buying

Online group buying was introduced in the mid-1990s, as a market mechanism that collects consumers' orders to obtain volume discounts (Kannan & Kopalle, 2001). This mechanism not only benefits consumers but vendors. Due to more people lower price, consumers have incentive to recruit more customers, so that internet vendors will be able to minimize consumer acquisition costs at the same time to offload excess inventories (Kauffman & Wang, 2001). Anand and Aron (2003) considered online group buying is composed of demand aggregation and quantity discounts, more demand more discounts, let consumer get better condition to purchase. Yuan and Lin (2004) considered online group-buying use time to exchange money, more quantity lower price, buyers have coordination abilities with vendors to achieve price discount which they want, but at the same time waiting for other buyers. Thus, the goal of online group-buying is to create a win-win situation between vendors and consumers, so as to maximize the aggregate social welfare by making each party better than they would be in the absence of this mechanism (Kauffman, Lai, & Ho, 2010).

Perceived Risk

Since the 1960s, the theory of perceived risk has been used to explain consumers' behavior. Bauer (1960) is the first one that developed perceived risk from psychology theory. According to Bauer (1960), consumers' behavior involved risk because their purchasing actions "will produce consequences which he cannot anticipate with anything approximating certainty, and some of which at least are likely to be unpleasant".

Cox (1967) proposed the perception that consumer get from the buying action is related to "Financial" or "Social-psychological". Woodside(1968) considered perceived risk has three dimensions: "Social", "Functional" and "Economic". In addition, Roselius (1971) indicated consumer might suffer time loss, hazard loss, ego loss and money loss. Jacoby and Kaplan

(1972) added financial risk and physical risk, proposed five type of perceived risks: financial risk; functional or performance risk; physical risk; psychological risk; and social risk.

Consumers are easier to perceive risks when shopping online than in physical store (Akaah & Korgaonkar, 1988; Tan, 1999). The reason might be that online group-buying can't sure that all shopping objects and condition would be completely success and finish, therefore, consumer will face financial risk, performance risk, psychological risk, physical risk, social risk and time risk. For online shopping, the major concern for consumer is network security and information privacy problem (Miyazaki & Fernandez, 2001). To sum up, in online group-buying environment, consumers may face seven risks, which include financial risk, performance risk, social risk, time risk, and privacy risk.

Risk-Reduction Strategies

Roselius (1971) proposed eleven strategies that consumers used to reduce risks regarding time loss, hazard loss, ego loss, and money loss. The strategies include endorsements, brand loyalty, major brand image, private testing, store image, free sample, money back guarantee, government testing, shopping, expensive model, and word of mouth. Derbaix (1983) fixates on the relationship between nine kinds of risk-reduction strategies (Money-back guarantee, Store Image, Advice of friends and relatives, Salesman's advice, Expert advice, Brand loyalty, Major Brand Image, Shopping, and Expensive mode) and different perceived risks. Akaah and Korgaonkar (1988) focus their research on direct-mail marketing, they use conjoint investigation to analyze the relative importance of the eight kinds of risk-reduction strategies in consumers' mind, the conclusion is that "Money-back guarantee" is the most essential strategy, and then are "Manufacturer's name", "Product cost", "Distributor's reputation", "Free sample/trial", "Endorsement by a trusted person", "Brand experience" and "Product newness".

Mitchell and Greatorex (1993) combined risk-reduction strategies suggested by Roselius (1971), Guseman, and Derbaix (1983) and proposed 14 strategies to reduce the risk of purchasing service: (1) trying the product/service before purchase; (2) reading advertising material about the product/service; (3) reading consumer guides; (4) choosing a cheaper product/service; (5) choosing a brand/supplier of the product/service which is well known or popular; (6) purchasing the same brand of the product or using the same supplier of the service that you purchased/used before, i.e. be brand loyal; (7) using the image of the product/service as a guide; (8) ensuring the product/service has some form of guarantee, (9) shopping around to compare what is on offer; (10) choosing a more expensive product/service; (11) favoring the products/services which are endorsed by a celebrity; (12) taking the advice of family and friends; (13) choosing a product/service which is subject to some sales promotion; (14) taking the advice of the sales assistant.

RESEARCH METHOD

Research Method

The purpose of this study is to explore the relationship between perceived risks and risk-reduction strategies in online group-buying environment. The perceived risks examined in this study include financial, performance, social, time and privacy risks. In order to choose appropriate risk-reduction strategies in current study, a pilot test was conducted. The result

suggested ten popular strategies in online group-buying context: brand loyalty, word of mouth, past experience, money back guarantee, store image, shopping, major brand image, free sample, website reputation, and payment security.

Operational Definition and Measurements

The operational definition and measurement of each variable was summarized in Table 1 and Table 2.

Table 1. Definitions of perceived risks

Perceived Risks	Operational Definition	Reference Source
Financial risk	Financial loss of consumers, including defect product, extra expense after purchase and the possibility of Internet hackers to steal credit card information.	(Cases, 2002; Forsythe & Shi, 2003; Lim, 2003)
Performance risk	The product is not as expect or does not match with the seller's description.	(Cases, 2002; Forsythe & Shi, 2003; Grewal, Gotlieb, & Marmorstein, 1994)
Social risk	Products purchased by consumers may lead others laugh.	(Featherman & Pavlou, 2003; Pires, Stanton, & Eckford, 2004)
Time risk	Waste time to exchange the defect product, too slow the web page download speed and the seller respondent	(Featherman & Pavlou, 2003; Lim, 2003; Tan, 1999)
Privacy risk	Personal information be stolen, resold or leak out.	(Cases, 2002; Forsythe & Shi, 2003; Lim, 2003)

The measurement of perceived risks was adopted from Peter & Tarpey (1975). Each subject was asked to provide the possibility and importance of each risk that might occur in online group-buying. The seven point scale was used in which 1 represent very impossible/the least important, while 7 represent very possible/very important.

Table 2. Definitions of risk reduction strategies

Risk reduction strategies	Operational Definition	Reference Source
Brand loyalty	Buy the brand you have used before and have been satisfied with in the past.	(Roselius, 1971)
Word of mouth	Ask friends or family for advice about the product.	(Roselius, 1971)
Past experience	Relying on past personal experience	(Cases, 2002)
Major brand image	Buy a major, well-known brand of the product, and rely on reputation of the brand.	(Roselius, 1971)
Free sample	Use a free sample of the product on a trial basis before buying.	(Roselius, 1971)
Shopping	Shop around on your own and compare product features on several brands in several stores.	(Roselius, 1971)

Money back guarantee	Buy whichever brand offers a money-back guarantee with the product.	(Roselius, 1971)
Store image	Buy the brand that is carried by a store which you think is dependable, and rely on reputation of the store.	(Roselius, 1971)
Website reputation	The reputation of the website.	(Cases, 2002)
Payment security	Payment process has guarantee.	(Cases, 2002)

This research uses five point scale to measure the risk reduction strategies. One indicate very not helpful and 5 indicate very helpful. The same scale was also used by Cases (2002), Mitchell and Greatorex (1993) and Roselius (1971).

Sample Collection

A questionnaire survey was conducted in campus. Before the subjects agreed to participate, a brief explanation was provided. Every subjects will fill in the questionnaire after they understand the purpose the study and agree to join. About 10% of the subjects were pull out from a lucky draw and were provided with a small gift as the incentive. There are 212 questionnaire were received, and 198 of them are valid.

RESULTS AND DISCUSSION

Demographic

The subjects were composed by 53.5 % males and 46.5% females. The majority of the subjects are undergraduate students (83.8%), followed by graduate students (16.2%). They ages mainly around 15-19 (52.0%) and 20-24 (47.5%) years old.

The Correlations between Perceived Risks and Risk- Reduction Strategies

Pearson correlation analysis was conducted to examine the relationship between perceived risks and risk reduction strategies. The result indicated that financial risk is related to money back guarantee, store image and payment security; while performance risk is related to brand loyalty, word of mouth, money back guarantee, major brand image and free sample. Time risk is related to shopping and website reputation, while privacy risk has significant correlation with shopping. There is no risk-reductions related to social risk.

Table 3: The Pearson correlation analysis of perceived risks and risk reduction strategies.

	Financial	Performance	Social	Time	Privacy
Brand loyalty	.008	.151 [*]	.030	.062	.029
Word of mouth	.121	.146 [*]	-.058	.078	.136
Past experience	.049	.035	-.112	-.043	.054
Money back guarantee	.200 ^{**}	.174 [*]	-.001	.062	.126
Store image	.174 [*]	.204 ^{**}	-.069	.045	.126
Shopping	.055	.099	.035	.207 ^{**}	.153 [*]
Major brand image	-.059	-.153 [*]	-.008	.048	-.030
Free sample	.125	.180 [*]	-.070	-.039	.100
Website reputation	.121	.094	-.030	.141 [*]	.135
Payment security	.140 [*]	.032	-.030	.121	.101

CONCLUSION

The results from current study suggested that when subjects perceived financial risk, brand loyalty, word of mouth, money back guarantee, website reputation and payment system will be adopted to reduce the risk. Derbaix (1983) found out when it comes to financial risk, consumers more likely seem brand loyalty, money-back guarantee, store image and shopping as the most critical strategy. Brand loyalty and money back guarantee is consistent with the results of this study. Van den Poel & Leunis (1999) also indicate money back guarantee ranks highest for both financial and performance risk but especially so with respect to reducing financial risk. People who concern about the product is not as expect, tend to release the risk by brand loyalty, word of mouth, store image and shopping. Lutz & Reilly (1973) said consumers tend to use more sources of information when faced with increasing degrees of perceived performance risk. Physical risk, worried about the health will be injured, shopping and free sample are helpful. Derbaix (1983), shopping is the most efficient way to decrease the psychosociological risk; except shopping, this study find out the psychological pressure from group-buying can ease by money back guarantee, free sample, website reputation and payment security. Time risk, by website reputation to infer the possibility of receive defective product is relatively low, therefore, needless to wait for replacement time. For privacy risk, word of mouth and website reputation can confirm website security, observe each shop's privacy strategy during shopping and payment security that claim personal information will not leak out, there strategies can reduce privacy risk.

CONTRIBUTIONS

If consumers would like to obtain more product information or verify the accuracy of the information from multiple sources, they often refer to the opinions of friends and relatives who purchased the same products or rely on shopping strategy, then compare the contents and qualities of different offerings. Therefore, vendors should act with honesty and provide detailed information as much as they can in order to avoid the concerns and complaints which make by consumers that will hurt the reputation the companies had tried very hard to establish.

Highly concerned about the possibility of the leakage of their personal data due to online group-buying and such worries may affect their purchase intention. Therefore, vendors should take heed of the proper protection of personal data of consumers and assurance of transaction security so as to reduce the perceived risks.

In order to reduce the waiting time and increase the purchase intention, vendors are suggested to have powerful search and navigation, quality and detailed product information, rapid response, simple and safe payment system and build up good reputation to attract more consumers.

Consumers are worried about all kinds of unexpected situations after the purchase of products and fear that their rights will be affected. Therefore, they are likely to choose the vendors with good reputation or have warranty because they believe that the better these vendors have been, the more experienced they are in handling unexpected situations or more adopt in risk preventions. Therefore, the vendors should strive to provide solutions to all kinds of unexpected situations in order to obtain the recognition from consumers for the quality of products.



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